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| 10/578,245 | 05/04/2006 | Mikio Kanda | 04173.0513 | 6721 |

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| EXAMINER | |
|---|---|
| CARLOS, ALVIN LEABRES | |
| ART UNIT | PAPER NUMBER |
| 3715 | |
| MAIL DATE | DELIVERY MODE |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/578,245 | KANDA, MIKIO | |
| | Examiner | Art Unit | |
| | ALVIN L. CARLOS | 3715 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *04 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/04/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract exceeds the general limit of 150 words. Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-3 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Inoue 20030043025.

Re claim 1, Inoue discloses an answer totaling and analyzing apparatus, comprising a center unit, plural answer units, and an auxiliary light-projecting and receiving unit (see figure 1), in which the center unit comprising an answer

command signal generating means generating a signal to command a transmission of an answer signal and generating synchronizing pulses assigning answer periods in which plural windows for answer signal are set on a time base for the plural answer units respectively, an answer command signal light-projecting means projecting the answer command signal as an optical signal (paragraph 0013 lines 1-6), an answer signal light-receiving means receiving the answer signals light from the plural answer units and an totaling and analyzing means detecting, totaling, and analyzing answers from the answer signal light-receiving means (paragraph 0013 lines 6-17), the plural answer units respectively comprising an answer command signal light-receiving means receiving the answer command signal light emitted by the center unit, an answer means selecting the window for answer signal at a time position corresponding to an answer from among plural windows for answer signal supposed within the answer period assigned by the answer command signal, and transmitting a pulse signal within the window as an answer signal to represent contents of the answer as the answer signal, and an answer signal light-projecting means projecting the pulse signal transmitted by the answer means as optical signal (paragraph 0013 lines 17-28), and the auxiliary light-projecting and receiving unit comprising a relay light-receiving means receiving light signals emitted by any one of the center unit, the plural answer units, or the other auxiliary light-projecting and receiving unit when plural auxiliary light-projecting and receiving units exist; a relay signal generating means generating a relay signal in accordance with the

received light signal; and a relay light-projecting means projecting the relayed signal as an optical signal (paragraph 0014).

Re claim 2, Inoue discloses the answer period defined by the answer command signal from the center unit is divided into plural answer sections by synchronizing pulses, and the answer section having a set of plural windows individually for an answer signal in which the plural answer units individually transmit the answer signals set in the respective answer sections; and the answer signal from each of the plural answer units is the one in which the pulse of the answer signal is respectively transmitted and emitted a light pulse in the window for answer signal selected to correspond to an answer from among the plural windows for answer signal respectively set in the plural answer sections within the answer period (paragraph 0069-0070).

Re claim 3, Inoue discloses the auxiliary light-projecting and receiving unit includes a light-emitting pausing means pausing light-emitting for a time shorter than a time of the minimum pulse interval in a regular signal pulse train immediately after receiving one signal light pulse from one of the other units and emitting for relaying (paragraph 0076).

Re claim 6, Inoue discloses the center unit comprising a calibration signal transmitting means transmitting a calibration signal preceding to a signal respectively specifying the answer period for the plural answer units in the answer command signal, the plural answer units respectively comprise calibration response signal transmitting means transmitting a calibration response signal preceding to the answer signal with responding to the calibration

signal, and the center unit further comprises a read time adjusting means measuring signal transmission times between the center unit and the respective plural answer units from time differences between the calibration signal transmitted by the center unit and the respective calibration response signals replied from the respective plural answer units, and adjusting read times of the answer signals from the respective plural answer units based on the measured signal transmission times (paragraph 0015 and 0064).

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue 20030043025 in view of Cho 6154300.

Inoue discloses all of the claimed subject matter with the exception of disclosing the feature of the auxiliary light-projecting and receiving unit is disposed at an upper space of a meeting room.

However, Cho teaches the auxiliary light-projecting and receiving unit is disposed at an upper space of a meeting room (see figure 8, column 4 lines 38-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Inoue's invention in view of Cho in order to provide an efficient communication system that utilizes a relaying unit (repeater/amplifier unit) for strengthening weak signals from replying units at long distances.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue 20030043025 in view of Knoblach 6628941.

Inoue in view of Cho discloses all of the claimed subject matter with the exception of disclosing the feature of the auxiliary light-projecting and receiving unit includes a balloon.

However, Knoblach teaches the auxiliary and receiving unit including a balloon (column 8 line 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Inoue in view of Cho invention and further in view of Knoblach in order to provide mobile relaying unit (repeater/amplifier unit) for effective communication between the center unit and the replying unit.

## ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed.

Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-3 and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5 and 8-9 of copending Application No. 10240087. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

Present claim 1, is obvious over claims 1-2 of copending application `087. Considering the present claim limitation “an auxiliary light-projecting and receiving unit”, is obvious over the prior art claim feature “a relay light-receiving means receiving light signals” because the auxiliary light-projecting and receiving unit has the same function as the relay light-receiving means that provide support between the center unit and the answer unit.

Present claim 2, is obvious over claim 5 of copending application `087.

Present claim 3, is obvious over claims 8-9 of copending application `087.

Present claim 6, is obvious over claims 1 of copending application `087.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as per the attached Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN L. CARLOS whose telephone number is (571)270-3077. The examiner can normally be reached on 7:30am-5:00pm EST Mon-Fri (alternate Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571)272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alvin L Carlos/
Examiner, Art Unit 3715
April 10, 2009

/Cameron Saadat/
Primary Examiner, Art Unit 3715